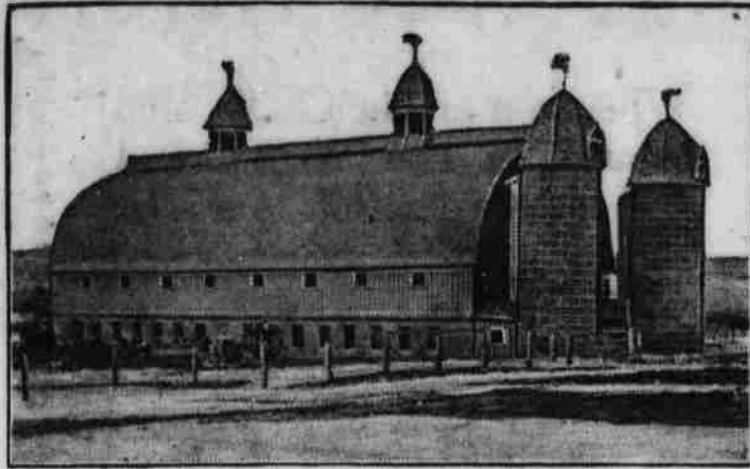
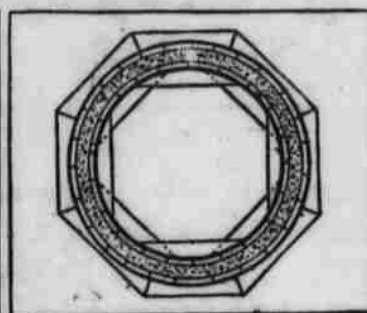


## CIRCULAR FORMS FOR CONCRETE WORK



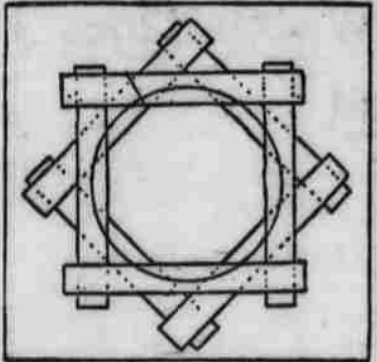
Modern Dairy Barn and Concrete Silos.

There are two sides—inner and outer—in a circular form for use in making concrete structures. Both sides are made in the same way, but the radii of the forms being different, they are not made by the same pattern. Make a circular form by drawing a circle of the size of the form desired and laying boards around the circumference of the circle. Nail the boards lightly together and, with the same radius, mark out the circle on them. Then knock them apart and saw them out along the lines marked and again fasten them together, this time securely. After enough forms are made for a section of the circular figure, set them up, equally spaced, and



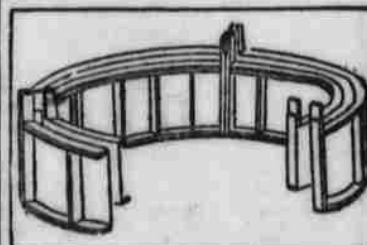
Concrete in Form.

The result is that re-enforced concrete is the cheapest where concrete material is costly and is adaptable for purposes where plain concrete is unfitted. The re-enforcement must be properly placed in order to develop the strength of the structure. As, for example, lead a concrete beam to the breaking point and it will be seen that the lower part of the beam has pulled apart, was in tension, while the upper part has crushed together, or was in compression. Therefore, if a beam be re-enforced, the re-enforcement should be placed near the lower part of the beam in order to take the tension, else the strength of the re-enforcement is undeveloped. In placing the concrete, take especial care not to displace the re-enforcement from its true position and to wholly and solidly embed it within the concrete.—Curtiss Hill in Missouri Report.



Outline of Concrete Form.

put on the side boards or "lagging." Concrete is either plain or re-enforced. One is concrete without any kind of re-enforcement and in which all the stresses are carried by the concrete. The other is plain concrete, re-enforced with steel bars, beams or other forms of metal or material. Re-enforcement is placed in concrete in order to take up certain stresses and reduce the volume of concrete. Concrete is strong in compression, but weak in tension, so if steel is embedded in the concrete in the proper place to take up the tensile stresses, a great saving of concrete is effected.



Circular Form.

## KIDNEYS CLOG UP FROM EATING TOO MUCH MEAT

Take Tablespoonful of Salts If Back Hurts or Bladder Bothers—Meat Forms Uric Acid.

We are a nation of meat eaters and our blood is filled with uric acid, says a well-known authority, who warns us to be constantly on guard against kidney trouble.

The kidneys do their utmost to free the blood of this irritating acid, but become weak from the overwork; they get sluggish; the eliminative tissues clog and thus the waste is retained in the blood to poison the entire system.

When your kidneys ache and feel like lumps of lead, and you have stinging pains in the back or the urine is cloudy, full of sediment, or the bladder is irritable, obliging you to seek relief during the night; when you have severe headaches, nervous and dizzy spells, sleeplessness, acid stomach or rheumatism in bad weather, get from your pharmacist about four ounces of Jad Salts; take a tablespoonful in a glass of water before breakfast each morning and in a few days your kidneys will act fine. This famous salts is made from the acid of grapes and lemon juice, combined with lithia, and has been used for generations to flush and stimulate clogged kidneys, to neutralize the acids in urine so it is no longer a source of irritation, thus ending urinary and bladder disorders.

Jad Salts is inexpensive and cannot injure; makes a delightful effervescent lithia-water drink, and nobody can make a mistake by taking a little occasionally to keep the kidneys clean and active.—Adv.

## Privilege Denied Them.

"Here's a picture of a woman golf champion."

"I see. And she looks almost graceful."

"Why shouldn't she look graceful?"

"I guess it's because golf champions cannot consistently adopt the pose made famous by Annette Kellerman."

## "CASCARETS" FOR LIVER, BOWELS

For sick headache, bad breath. Sour Stomach and constipation.

Get a 10-cent box now.

No odds how bad your liver, stomach or bowels; how much your head aches, how miserable and uncomfortable you are from constipation, indigestion, biliousness and sluggish bowels—you always get the desired results with Cascarets.

Don't let your stomach, liver and bowels make you miserable. Take Cascarets to-night; put an end to the headache, biliousness, dizziness, nervousness, sick, sour, gassy stomach, backache and all other distresses; cleanse your inside organs of all the bile, gases and constipated matter which is producing the misery.

A 10-cent box means health, happiness and a clear head for months. No more days of gloom and distress if you will take a Cascaret now and then. All stores sell Cascarets. Don't forget the children—their little insides need a cleansing, too. Adv.

## Barred Out.

Husband—Have you called upon those new people yet?

Wife—No, we can't associate with them. I was saved from doing it in the nick of time.

Husband—What happened?

Wife—Why, by the merest accident I heard that they run an open car all winter.—Judge.

## GAS, DYSPESIA AND INDIGESTION

"Pape's Diapiesin" settles sour, gassy stomachs in five minutes—Time it!

You don't want a slow remedy when your stomach is bad—or an uncertain one—or a harmful one—your stomach is too valuable; you mustn't injure it.

Pape's Diapiesin is noted for its speed in giving relief; its harmlessness; its certain unfailing action in regulating sick, sour, gassy stomachs. Its millions of cures in indigestion, dyspepsia, gastritis and other stomach trouble has made it famous the world over.

Keep this perfect stomach doctor in your home—keep it handy—get a large fifty-cent case from any dealer and then if anyone should eat something which doesn't agree with them; if what they eat lays like lead, ferments and sours and forms gas; causes headache, dizziness and nausea; eructations of acid and undigested food—remember as soon as Pape's Diapiesin comes in contact with the stomach all such distress vanishes. Its promptness, certainty and ease in overcoming the worst stomach disorders is a revelation to those who try it.—Adv.

## How to Talk to the Wounded.

"What the boches can't stand, you know, ma'am, is cold steel."

"Yes, I suppose it gets very cold this time of the year."—London Punch

## WHO'S WHO~and WHEREFORE

## BEN JOHNSON AND MANDY



Representative Johnson of Kentucky, tall of figure and solemn of countenance, furnished amusement for a lot of people in the Union station at Washington recently. He stood by the big gate where most of the passengers were coming from a train, and every few moments remarked, in a tone of authority, to nobody in particular: "Right this way, Mandy; I'll take care of you."

Now, there wasn't anybody named Mandy there, you understand, and everybody wondered why a congressman should be standing there saying over and over again: "Right this way, Mandy; I'll take care of you."

What sense was there to a man doing such a thing as that? After he had said it many times, Johnson went away, but in a couple of hours he was back again, repeating the same line, with the same calm dignity as before. People were puzzled. Yet it was

all simple enough. The Johnsons had sent to Kentucky for a cook, yelet Mandy. They knew her name, but that was all; they didn't even know for sure which train would bring her. But, according to reports, she was a wonderful cook who could play culinary selections on a gas stove just by ear, producing southern dishes of rare quality and fragrance.

And that was the reason why the dignified Congressman went to all the trains and cried out, every time he saw an able-bodied colored woman: "Right this way, Mandy; I'll take care of you!"

## RUCKER COURTED TROUBLE

When Representative Rucker of Missouri the other day asked the house to authorize the secretary of war to donate to the city of Trenton, in Grundy county, Missouri, four iron cannon there were many smiles in the chamber.

The humor of the situation later was explained.

Last session a member of the New York delegation introduced a similar bill. It was passed and in due time the cannon were delivered. Subsequently the house was asked to approve a claim bill of \$1,000 filed by a railroad company which had shipped the field pieces. When the freight charges were presented to the citizens of the town they balked and informed the representative that Uncle Sam could "keep his old cannon." The railroad is still demanding pay for toting the war relics.

Every so often Representative Igoo of St. Louis is asked to obtain cannon for the Fairground park, on North Grand avenue. Invariably Mr. Igoo has answered that he will get the cannon if anyone will guarantee to pay the freight. Thus far no one has come forward with the pledge.



## MILENA, MILKMAID QUEEN



The fall of Cetinje will grieve no one more than Milena, the beautiful queen of Montenegro, who came straight from being a milkmaid to rule her brave people.

It is in this small but beloved capital that she has lived since marriage, nursing her children and at the same time showering her mother love upon all her subjects, with whom she lives in closest touch.

A little more than fifty years ago she was little Milena Constatinovich, peacefully and contentedly working upon her father's farm amidst the hills and valleys of the Black mountains. Her chief care then was looking after the cows, and early morning saw her emerge from the house, pail in hand, on the way to milk the cows. In those simple days she never dreamed that she would be called upon to wear a crown.

In the strict sense of the word her marriage was not a "love affair." That is, there was no falling in love at first sight, or anything so romantic. But in accordance with the custom of her country she was called from her farm work to be the bride of young Nicholas Petrovitch, the heir to the throne, because she was the loveliest child in the land. She was only thirteen when her nomination as the future bride took place, and a year later she was welcomed to Cetinje, and there wedded to the eighteen-year-old boy who had been selected by his uncle, the then Prince Danilo, to succeed him on the throne of Montenegro.

Their simple lives and the strong love that has grown between king and queen, are examples which the Montenegrins boast of with just pride.

## DR. FREDERICK G. COTTRELL

According to Charles D. Walcott, secretary of the Smithsonian institution, and vice president of the Research corporation of New York, the Research corporation, in the three years of its life, has earned something more than \$100,000. The rate of its earnings is on the increase.

Behind this bare statement is a remarkable story of self-sacrifice and devotion to the common weal. It is the story of Dr. Frederick Gardner Cottrell of California, whose fame among scientists is great, but who is almost unknown to the general public.

To put it briefly, Doctor Cottrell is the inventor and patentee of an electrical process to precipitate the solid matter in smoke. In many parts of the country it has revolutionized the smelter industry; it is moving to a point where it will make smoke-ridden cities free of coal dust and dirt.

But when the commercial success of the invention had been assured, Doctor Cottrell assigned his patent rights to the Smithsonian institution, with the sole proviso that the earnings should be devoted to the advancement of science. The Research corporation was organized in 1913 to handle and administer the fund.



## GUARD YOUR FAMILY

PERUNA protects the family against coughs, colds, catarrh, bronchitis, catarrh of the stomach, liver and kidneys. It is just as sure to relieve a case of catarrh of the bowels as it is a case of catarrh of the head.

Anyone suffering from catarrh, severe or mild, acute or chronic, in any organ or part of the human body, should at once get a bottle of PERUNA.

As soon as the value of PERUNA is fully appreciated in every household, both as a preventive and a relief from catarrhal affections, tens of thousands of lives will be saved and hundreds of thousands of chronic lingering cases will be prevented. PERUNA, indeed, is a household safeguard.

A course of PERUNA never fails to bring relief in such cases, since there is no remedy like it, as thousands of people have testified. Peruna Tablets are now available in convenient tins. Easy to take.

## Children for Farm Work.

The Kent (England) education committee has again decided to release children twelve years of age and upwards from school attendance for employment in agriculture during the summer months. Children of not less than twelve years of age are also to be released this year for employment in home duties if thereby their mothers can be employed in agriculture.

## FIERY RED PIMPLES

Soothed and Healed by Cuticura Soap and Ointment. Trial Free.

Smear the affected skin with Cuticura Ointment on end of finger. Let it remain five to ten minutes. Then wash off with plenty of Cuticura Soap and hot water. Dry without irritation. Nothing like Cuticura for all skin troubles from infancy to age.

Free sample each by mail with Book. Address postcard, Cuticura, Dept. L, Boston. Sold everywhere.—Adv.

## DISEASE ON THE DECREASE

Association for the Study and Prevention of Tuberculosis Has Good Reason to Be Proud.

While the latest report of the bureau of census shows that in 1914 tuberculosis caused over 10.5 per cent of all deaths in the registration area of the United States, the National Association for the Study and Prevention of Tuberculosis points out in a statement that the death rate from this disease is steadily decreasing, having declined from 200.7 per 100,000 population in 1904 to 146.8 in 1914. This would indicate, the association claims, that the antituberculosis movement organized in the last ten years is having a marked effect on the mortality of tuberculosis, especially since the death rate from this disease seems to be declining more rapidly than the general death rate from all causes.

Commenting on this decrease in the rate from tuberculosis, the bureau of the census says: "As a result of a more general understanding of the laws of health, the importance of fresh air, etc., due in part, no doubt, to the efforts of the various societies for the prevention of tuberculosis, there has been a most marked and gratifying decrease during recent years in the mortality from this scourge of civilization. In only a decade—from 1904 to 1914—the death rate from tuberculosis in all its forms fell from 200.7 to 146.8 per 100,000, the decline being continuous from year to year. This is a drop of more than 25 per cent."

## The Humorous Hat.

"Has she any sense of humor?" "I don't think so. She can look at her hat without laughing."

## MORE THAN EVER Increased Capacity for Work Since Leaving Off Coffee.

Many former coffee drinkers who have mental work to perform day after day, have found a better capacity and greater endurance by using Postum instead of coffee. An Illinois woman writes:

"I had drank coffee for about twenty years, and finally had what the doctor called 'coffee heart.' I was nervous and extremely despondent; had little mental or physical strength left; had kidney trouble and constipation. The first noticeable benefit which followed the change from coffee to Postum was the improved action of the kidneys and bowels. In two weeks my heart action was greatly improved and my nerves steadier."

"Then I became less despondent, and the desire to be active again showed proof of renewed physical and mental strength."

"I formerly did mental work and had to give it up on account of coffee, but since using Postum I am doing hard mental labor with less fatigue." Name given by Postum Co., Battle Creek, Mich.

Postum comes in two forms: Postum Cereal—the original form—must be well boiled, 15c and 25c packages.

Instant Postum—a soluble powder—dissolves quickly in a cup of hot water, and, with cream and sugar, makes a delicious beverage instantly. 30c and 50c tins.

Both forms are equally delicious and cost about the same per cup.

"There's a Reason" for Postum.—Sold by Grocers.

## ANGULAR LEAF-SPOT OF THE CUCUMBERS

Disease Quite Prevalent Throughout Eastern, Middle Western and Southern States.

The angular leaf-spot of cucumbers is a disease quite prevalent throughout the eastern and middle western states. It was reported as having been present the past year in Michigan, Indiana, Wisconsin and New York, as well as the provinces of Ontario and Quebec, in Canada. The disease has also been reported recently from Maryland and other southern states.

The presence of the disease is indicated by angular, dry, brown spots on the foliage, which, by dropping out or tearing, give the leaves a ragged appearance. Although the disease has been known for many years in the field, and has been conceded to be of bacterial origin, heretofore no organism has been named as its cause. As a result of experiments recently conducted by the plant pathologists of the United States department of agriculture, however, the germ causing the disease has been isolated and identified.

It was found that the disease is caused by a bacterial organism entering the leaf through minute orifices in the outer layer, wounds not being necessary to permit infection. Young stems may become soft-rotted or crack open, but no direct connection has been found between the leaf-spot and the soft rot of the fruit. A heavy infestation, however, often materially reduces the crop by destroying the active leaf surface of the plants.

## GARDEN HERBS FOR CULINARY PURPOSES

Most Kinds of Plants Are Easily Grown and Should Be Considered This Spring.

Very few gardens have a good supply of herbs for culinary purposes, yet most kinds are easily grown, and should be considered when planting the garden this spring. Europeans make much more of such things than we do.

Sage and thyme are similar in their manner of growth, being propagated either from seeds or layers from the

parent plant. The uses of sage are well known. Thyme makes an excellent seasoning for soups and boiled meats, the buds and leaves being used for the purpose. Tender tops and shoots of summer savory are often mixed with thyme and sage, or perhaps with marjoram. Summer savory is grown from seed each year.

Another kind, known as winter savory, is a perennial, and will live in the ground year after year, and furnish a lot of flavoring and garnishing. Marjoram can be grown from seed planted in drills, and the plants thinned to stand two feet apart. It is the favorite dressing for fish, but is also used in meats and soups.

## HYGIENIC METHODS ARE OF MUCH VALUE

Few Timely Suggestions May Be of Great Value in Construction of House for Hogs.

(By W. J. WILSON, Assistant in Serum Production, South Dakota Experiment Station.)

Hygiene means health, and all methods employed in keeping the herd in a healthy, thrifty condition, are hygienic methods.

If thinking of building a new hog-house or remodeling the old one, a few timely suggestions may be of value. In the first place, locate the house in such a manner that you may get direct rays of sunlight into every pen, as sunlight is a most effective germ killer.

Arrange for a system of ventilation; a hole cut in the roof is not sufficient. Have plenty of pure air, but do not allow the hogs to sleep in a draft.

See that the hogs have dry sleeping quarters. Hogs that are obliged to sleep in hot, steamy pens without proper ventilation, are very susceptible to pneumonia when turned into the feed lot in cold weather. Plenty of exercise for the breeding stock is very essential to the maintenance of good health.

These points, together with good clean food and plenty of clean fresh water, mean healthy hogs that have lots of resistance against disease.

## Mating Young Sows.

It is a good rule to mate young sows with a mature boar, one that has done service before, and to use young boars on sows that have had a least one litter of pigs. In this way, to a certain extent at least, you avoid the results of immature breeding which are sometimes had if both boar and sow are very young.